APPLICATION No.:
ATTORNEY DOCKET No.:

#### **REMARKS**

## (A) Status of the Application

- (I) <u>Disposition of Claims</u>
- (i) Claims 1-20 are pending in the application.
- (ii) Claims 1-20 are rejected.
- (II) Applicants' Action
- (i) Applicants have amended Claims 1, 19, and 20.
- (ii) Applicants respond to the rejection.

## (B) Rejection under 35 U.S.C. § 102(b)-Claims 1-6, 18, & 19

In the February 20, 200 Office Action ("Office Action"), the Examiner rejected Claims 1-6, 18, and 19 as being anticipated by U.S. Patent No. 5,917,927 to Satake, *et al.* ("Satake"). For Claims 1 and 18, according to the Examiner, Satake discloses all elements. The Examiner also states that Satake also teaches limitations of each dependent Claims 3-6. However, the Examiner fails to disclose her reasoning for why Satake allegedly anticipates Claims 2 and 18.

Applicants respectfully disagree with the Examiner that Satake anticipates Claims 1, 3-6 and 19. As to Claims 2 and 18, Applicants submit that Satake is a non-anticipatory reference.

To anticipate a claim, a single reference must disclose all the claim elements. Satake fails to disclose all elements of the present invention. Claims 1-18 of the present invention relate to an apparatus for analyzing samples of flowable objects, which comprises a image conveyor that has at least one presentation area for containing the objects. Each presentation area is associated with a triggering device that helps control and activate the operation of a radiation device and a data capturing means. Fig. 7 of the present application shows these elements. As explained in the description at paragraph [0065], the triggering device helps activate the radiation and data capturing devices when the object presentation area arrives at a particular location on the imaging conveyor. Therefore, as shown in the Fig. 7 embodiment, as objects deposited onto each presentation area pass the radiation and data capturing devices, the triggering device of each presentation area helps control and activate the radiation and data capturing devices to gather data on the objects in the each presentation area.

Satake does not teach or suggest the triggering device feature for each presentation area on the image conveyor. Satake's "line 83," which the Office Action referred to at page 3, is not at all a triggering device. In examining Satake's Figure 2 and its corresponding description, it is clear that "line 83" is a passive focus point of the camera of the Satake device. It does not perform any triggering function to control activation of a radiation or capturing device as in the present invention. For example, Satake, in Col. 7, Lines 1-25, clearly states that its device has a camera that is *focused* on a "line 83". This "line 83" is not a physical device or marker; it is merely the space onto which the camera focuses. In operation, Satake's camera operates continuously while a tray holding the objects moves along a path, so that the camera captures images at its focal point, i.e. "line 83", as the objects

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move past the focal point (line 83) on the tray. Thus, "line 83" is merely a passive focal point that does not perform any triggering function.

In light of the above difference, Satake is a non-anticipatory reference. To more clearly set out the distinctions to Satake and to clarify the claimed features, Applicants herein amend independent Claims 1 and 19. Since all remaining claims depend from Claims 1 or 19, Applicants respectfully submits that each of Claims 1-6, 18, and 19 are novel over Satake. Applicants respectfully request that the Examiner withdraw the 35 U.S.C. § 102(b) rejection.

#### **(C)** Rejection under 35 U.S.C. § 103(a)-Claims 2-20

The Examiner rejected Claims 2-20 as obvious under 35 U.S.C. § 103(a) over Satake further in view of one or more of the secondary references.

Applicants respectfully disagree with the Examiner's position because she fails to meet her burden of establishing a prima facie case of obviousness for the claimed invention. Applicants note that it is the examiner "who bears the initial burden of factually supporting any prima facie conclusion of obviousness," and, as such, the examiner cannot simply make a conclusory statement of obviousness, but rather "must provide evidence which as a whole shows that the legal determination sought to be proved (i.e., the reference teachings establish a prima facie case of obviousness) is more probable than not" (MPEP § 2142).

"To establish prima facie obviousness of a claimed invention, [the minimum requirement is that] all the claim limitations must be taught or suggested by the prior art" (MPEP § 2143.03, citing In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974) (emphasis added)). Applicants however note that this is not a sufficient condition for establishing obviousness of a claim. Here, Satake unilaterally, or in combination with one or more of the secondary references, fails to teach or suggest all claim limitations, and thus prima facie obviousness has not been established. Applicants herein incorporate in entirety the previous section's anticipation discussion vis-à-vis Satake. Also, Applicants discuss Claim 1 elements to demonstrate how the combined references do not disclose all elements. Because dependent claims incorporate the elements of the independent Claim 1, the discussion applies at least equally to the dependent claims. Also, because Claim 19 and its dependent Claim 20 include all elements of Claim 1, the following discussion applies to Claims 19 and 20.

First, independent Claim 1 includes the triggering device limitation that initiates data capture with radiation onset. Satake, or the secondary references nowhere discloses such a trigger. In fact, Satake does not even make the slightest suggestion that such a trigger would be useful in its invention. Instead, Satake merely alludes to an imaginary line (83), not a physical object, on which the camera is focused (See Satake, Fig. 2). Given this, Satake fails to teach or even suggest independent Claim 1's trigger limitation.

The Examiner cites that several secondary references can be combined with Satake. However, none of these references redeem Satake's "all elements" deficit. For example U.S. Patent No. 5,379,949 to Massen, et al. describes a particle treating device that does not teach or suggest the triggering device. Similarly, U.S. Patent No. 4,572,666 describes a grain

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detection device that likewise does not teach any triggering device as claimed or the coordinated movement of metering belt with the image conveyor. U.S. Patent No. 5,898,792 to Oste, et al. relates to a corn assessment apparatus that again fails to teach or suggest the claimed invention. U.S. Publication No. 2003/0090664 to Amonette, et al. relates to spectroscopy and also does not teach any triggering mechanism. Finally, U.S. Patent No. 6,629,010 to Lieber, et al. describes a control system with a spring-loaded feeder that also does not refer to any triggering device as claimed in the present invention.

In addition, given the cited references, the triggering device and other novel elements of Claim 1 would not have been obvious to try from a person skilled in the art standpoint because the elements are not even disclosed in the references, again demonstrating the nonobviousness of the present invention. However, even if in a hypothetical scenario all elements are disclosed in the cited references (which in reality, they are not), according to the Supreme Court in KSR Int'l v. Teleflex Inc., 127 S.Ct. 1727, 1742, 82 USPQ2d 1385, 1397 (2007), a claim can be found obvious if it can be shown that the claimed combination of elements was obvious to try, which can occur "[w]hen there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions" (emphasis added). Here, while there might be a market pressure to develop an object analysis device which can provide rapid and precise testing and measurement of objects such as grain seeds, there was not a finite number of identified, predictable solutions to this problem. Instead, there possibly is practically infinite number of solutions, since there are a practically infinite number of methods which could be combined to arrive at making an object analysis device. Moreover, the references and particularly Satake did very little to narrow this infinite field of possibilities, in fact it did not allude to the issues, at all. The references practically do nothing to add predictability to the wide class of possible choices. Given such disclosures, it would not have even been obvious to try the solution arrived at in the present invention, namely the use of a triggering device, coordination of the metering belt and the image conveyor, and a dense monolayer of grain seeds on the scanning area, again demonstrating that Claim 1 of the present application should not be deemed obvious over Satake in view of the secondary references.

For all the above reasons, Applicants submit that Claims 2-20 should be deemed nonobvious over Satake further in view of the secondary references. As Claims 2-18 are dependent upon, and narrower than Claim 1, and Claims 19 and 20 incorporate all elements of Claim 1, Applicants assert that all of Claims 2-20 should be held to be nonobvious in view of the cited references.

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# **CONCLUSION**

In view of the above remarks, Applicants respectfully submit that they have properly traversed, accommodated, or rendered moot the stated grounds of rejection and have made a complete response to the Non-Final Office Action of February 20, 2008. Applicants therefore believe that the application is allowable and respectfully solicit a Notice of Allowance with withdrawal of all grounds of rejection.

If the Examiner has questions regarding the application or the contents of this response, she is invited to contact the undersigned at the number provided.

Under 37 C.F.R. § 1.136(a), Applicants also include a petition for a one-month extension of time to respond to the Office Action. Should there be a fee due which is not accounted for, please charge such fee to Deposit Account No. 501447.

RESPECTFULLY SUBMITTED,

DATE: JUNE 20, 2008

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